

METHOD AND APPARATUS FOR IMAGE PROCESSING

ABSTRACT OF THE DISCLOSURE

[0044] An image processing system includes, in part, an image processing engine adapted to perform object-independent processing corresponding to a first processing layer of the image processing system, a post processing engine adapted to perform object-dependent processing corresponding to a second processing layer of the image processing system, and a processing engine adapted to perform object composition, recognition and association corresponding to a third processing layer of the image processing system. The image processing engine includes a multitude of processors each associated with a different one of the pixels of the image. The post processing engine includes an N-way symmetric multi-processing system (SMP) having disposed therein N DFT engines and N matrix multiplication engines, where N is an integer greater than 1. The multitude of the processors of the image processing engine are formed on a semiconductor substrate different from the semiconductor substrate on which images are captured.

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